

DATELINE: WASHINGTON, D.C. #107
ALINA ZERANSKI

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SPACEWARD FROM WASHINGTON
(INSERTS IN TAPE LIBRARY)

ANNCR: DATELINE: WASHINGTON, D.C. -- PICTURES IN SOUND OF PEOPLE, PLACES AND EVENTS HERE IN THE CAPITAL OF THE UNITED STATES -- BROUGHT TO YOU BY THE VOICE OF AMERICA EACH WEEK AT THIS TIME. TODAY, A REPORT PREPARED BY ALINA ZERANSKI ON A VISIT TO A NATIONAL INSTITUTION IN SERVICE TO THE WORLD.

NARR: WITH THE AMERICAN VIKING PROBES SEARCHING THE SURFACE OF MARS. EVERYONE WANTS A CLOSER LOOK AT THE RED PLANET THESE DAYS, SO THE NAVAL OBSERVATORY IN WASHINGTON, D.C., IS BUSIER THAN EVER. AND PROFESSIONAL STAR GAZERS THERE HAVE SET ASIDE SOME TIME TO ANSWER QUESTIONS FROM THE CURIOUS CROWDS. THE OBSERVATORY IS OPEN TO THE PUBLIC DURING THE DAY, BUT THERE'S AN ADDITIONAL REAL TREAT ON SPECIAL NIGHTS WHICH ARE SCHEDULED EACH MONTH. THAT'S WHEN ENTIRE BOY SCOUT TROOPS HAVE A PEEK AT CELESTIAL OBJECTS. ADMISSION IS FREE. ON A CLEAR NIGHT, WHEN THE MOON BATHES THE WHITE TELESCOPE DOMES, SOMETIMES AS MANY AS 400 PEOPLE POUR ONTO THE OBSERVATORY GROUNDS.

TAPE: CUT ONE -- SEIDELMANN

"THE BUILDING IS A WELL BUILT STONE STRUCTURE BUILT BACK IN THE 1890S FOR THE NAVAL OBSERVATORY. IT HAS WIDE CORRIDORS, TALL CEILINGS... A LIBRARY WHICH IS CIRCULAR WAS BUILT WITH A LARGE SPACE AND A FOUNTAIN IN THE MIDDLE TO PROVIDE MOISTURE FOR THE BOOKS, AS YOU WOULD DO BACK IN THE 1890S WHEN WE DIDN'T HAVE AIR CONDITIONING SYSTEMS."

NARR: DR. KENN SEIDELMANN, THE HEAD OF THE OBSERVATORY'S OFFICE OF NAUTICAL ALMANACS.

NARR: VISITORS CAN LEARN ALL ABOUT THE MISSION AND THE HISTORY
(CONT'D) OF THIS NATIONAL INSTITUTION THROUGH A SPECIAL MOVIE. THE
OBSERVATORY WAS FOUNDED IN 1830, PRIMARILY TO SERVE
NAVIGATION. AT THE TURN OF THE CENTURY, THIS SPACIOUS
BUILDING WAS CONSTRUCTED TO HOLD THE OFFICES, AND SEVERAL
SMALLER ONES WERE BUILT FOR THE TELESCOPES AND THE
LABORATORIES ON VAST LANDSCAPED GROUNDS.

TAPE: CUT TWO -- SIEDELMANN

"THE VISITORS COME IN, AND WE HAVE DISPLAYS IN THE HALLWAY
OF THE MAIN BUILDING. THEY CAN LOOK INTO THE LIBRARY. WE
HAVE A SECTION OF PICTURES OF ASTRONOMICAL ITEMS...WE
HAVE SOME DISPLAYS THAT ARE WORKING DISPLAYS. THEY CAN
TRY AND MEASURE THE SEPARATION OF A PAIR OF STARS. THEY
CAN TRY AND LOOK THROUGH A SEXTANT TO MEASURE THE ALTITUDE
OF AN ARTIFICIAL STAR.. WE HAVE A TIME DEPARTMENT WHERE
THEY CAN SEE A REAL CLOCK THAT IS REALLY WORKING THAT IS
PART OF OUR TIME SYSTEM AND SEE HOW WE MONITOR TIME
TRANSMISSIONS FROM AROUND THE WORLD."

NARR: THE NAVAL OBSERVATORY IS THE OFFICIAL ARBITER OF THE CORRECT
TIME IN THE UNITED STATES. PRECISE TIME IS DISTRIBUTED TO
TIME REFERENCE STATIONS WORLDWIDE VIA COMMUNICATIONS
SATELLITES WITH A PRECISION OF ONE TENTH OF A MILLIONTH
OF A SECOND. SOMETIMES A WHOLE COLLEGE CLASS COMES HERE
WITH THEIR PROFESSOR TO STUDY. MANY ASTRONOMERS VISIT
MONTHLY TO TALK WITH THE SCIENTISTS, AND STUDY THE LATEST
ASTRONOMICAL DEVELOPMENTS. AND OF COURSE IT IS A FAVORITE
TOURIST ATTRACTION:

TAPE: CUT THREE -- SEIDELMANN

"THEY CAN VISIT A 24-INCH TELESCOPE WHICH WE HAVE CONNECTED
BY CLOSED CIRCUIT TELEVISION SO THAT THEY SEE THROUGH THE
TELESCOPE BY MEANS OF TELEVISION.. AND FINALLY, THEY CAN
HAVE AN OPPORTUNITY TO VISIT THE 26-INCH TELESCOPE WHICH
THEY CAN ACTUALLY LOOK THROUGH. THE FLOOR OF THIS
INSTRUMENT MOVES UP AND DOWN SO IT CAN MOVE THE GENERAL
PUBLIC UP TO THE EYE PIECE. THEY CAN LOOK THROUGH THE

TAPE: INSTRUMENT AND WE TRY AND FEATURE WHATEVER IS INTERESTING (CONT'D) IN THE SKY THAT EVENING."

NARR: THE NAVAL OBSERVATORY IS ONE OF THE FEW SUCH FACILITIES IN THE WORLD -- AND THE ONLY ONE IN THE UNITED STATES -- WHERE FUNDAMENTAL POSITIONS OF THE SUN, MOON, PLANETS AND STARS ARE CONTINUALLY DETERMINED. THE 26-INCH REFLECTING TELESCOPE WAS BUILT IN 1873. IT WAS THEN THE LARGEST IN THE WORLD. FOUR YEARS LATER IT GAINED FAME WHEN THE SATELLITES OF MARS WERE DISCOVERED HERE.

IT HAS SINCE BEEN MODERNIZED AND STILL SERVES WELL FOR OBSERVATIONS AND MEASUREMENTS OF THE DISTANCES BETWEEN STARS.

EACH YEAR THE OBSERVATORY PREPARES THE AMERICAN EPHEMERIS AND NAUTICAL ALMANAC TO SERVE FOR THE NEEDS OF SURFACE AND AIR NAVIGATION. THE ALMANAC ALSO PROVIDES DATA FOR ASTRONOMERS, SURVEYORS, LAWYERS AND PRODUCERS OF COMMERCIAL CALENDARS AND ALMANACS. IT IS AN INTERNATIONAL PUBLICATION USED BY MANY COUNTRIES. RIGHT NOW IT IS BEING REVISED. THE MATERIAL WILL BE PRESENTED IN A FORM READABLE BY COMPUTERS AND USEABLE FOR PEOPLE WITH ELECTRONIC HAND CALCULATORS.

TAPE: CUT FOUR -- SEIDELMANN

"WE STILL ARE PERFORMING THE SAME BASIC FUNCTIONS THAT WE WERE PERFORMING BACK WHEN WE WERE FOUNDED, PUBLISHING THE AMERICAN EPHEMERIS AND NAUTICAL ALMANAC AND OTHER ASTRONOMICAL INFORMATION. WE DETERMINE PRECISE TIME WHICH WAS NECESSARY FIRST FOR NAVIGATORS, WHICH IS WHY THE NAVY WAS INTERESTED IN PRECISE TIME, BUT TODAY, IT HAS MANY USES BOTH IN THE DEFENSE DEPARTMENT AND FOR THE COUNTRY AT LARGE. WE CONTINUE TO MAKE OBSERVATIONS TO DETERMINE THE POSITIONS OF STARS AND THE POSITIONS OF THE SUN, MOON AND PLANETS."

NARR: THE OBSERVATORY EMPLOYS EIGHTY ASTRONOMERS AND SCIENTISTS PLUS MANY SUPPORT PEOPLE. THEY WORK IN CLOSE CONTACT WITH SIMILAR INSTITUTIONS ABROAD. THE WHOLE OPERATION IS FINANCED BY THE UNITED STATES NAVY. THE NAVY TOOK UP THIS DUTY LONG AGO NOT SOLELY FOR ITS OWN BENEFIT, BUT ALSO BECAUSE, AS PRESIDENT JOHN QUINCY ADAMS SAID: "THERE IS NO RICHER FIELD OF SCIENCE OPEN TO THE EXPLORATION OF MEN IN SEARCH OF KNOWLEDGE THAN ASTRONOMICAL OBSERVATION."

ANNCR: THIS HAS BEEN DATELINE: WASHINGTON, D.C. -- PICTURES IN SOUND OF PEOPLE, PLACES AND EVENTS HERE IN THE CAPITAL OF THE UNITED STATES BROUGHT TO YOU BY THE VOICE OF AMERICA EACH WEEK AT THIS TIME. TODAY YOU HEARD ABOUT THE U.S. NAVAL OBSERVATORY. NEXT _____ ANOTHER DATELINE, WASHINGTON.

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